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ABSTRACT

The management of higher education in federal systems is discussed in two papers that resulted from a 10-day seminar in Australia. "The Changing Balance in Federal-State Responsibilities: Postsecondary Education in Australia and the United States" discusses the environment of higher education, its overall structure, access and enrollments, finance, employment and higher education, research and excellence, community orientation, and coordination and rationalization. Overviews of the federal and state roles in higher education in the U.S. and Australia are provided. "The Federal and State Priorities for Postsecondary Education: An Australian Perspective" outlines the valuation of social returns of education in relation to costs and the political priorities that influence governmental educational policy. (SPG)

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FEDERAL/STATE RESPONSIBILITIES FOR POSTSECONDARY EDUCATION: AUSTRALIA and THE UNITED STATES

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CONTENTS

	page
Foreword *James A. Perkins*	v
The Changing Balance in Federal-State Responsibilities: Postsecondary Education in Australia and the United States *Barbara B. Burn*	1
Federal and State Priorities for Postsecondary Education: An Australian Perspective *Peter Karmel*	55
Seminar Participants	65

FOREWORD

The seminar on Federal Systems of Higher Education held in Australia in April 1977 represented the conjunction of several interests. The first was that of the International Council for Educational Development (ICED) which is conducting a study of the Design and Management of Systems of Higher Education. Australia is one of the 12 countries involved in this examination. Australian interests were already engaged and the ICED was anxious to manage a discussion between Australian and U.S. educators on this important topic.

The second interest was that of Australia itself which was in the process of reorganizing its coordinating and planning bodies for the tertiary education sector. Furthermore Bruce Williams, Vice-Chancellor of the University of Sydney, was chairman of a new commission set up to examine a whole range of problems having to do with postsecondary education.

Finally, the Carnegie Corporation of New York and the Carnegie Council on Policy Studies in Higher Education had contingent interests in this examination. The Carnegie Corporation had for years followed developments in Australia through its Commonwealth program and the Carnegie Council had looked for opportunities to discuss matters on its agenda with other countries facing similar problems.

The Australian leadership was assumed by Peter Karmel, chairman of the Australian Universities Commission, now the Tertiary Education Commission. The quartet of Peter Karmel, Clark Kerr, James A. Perkins and Alan Pifer had met in Hong Kong to hammer out the details, and the complete party arrived in Australia for a ten-day visit in the latter part of March 1977. The visiting party of U.S. educators was fortunate to be able to include Pauline Jewett, president of Simon

Fraser University in Canada. This made it possible to bring a third federal system into our discourse.

It is not relevant to this preface to report on the whole itinerary and the content of discussions in Australia which took place first in Canberra, with subsequent visits to a variety of state capitals and universities, and a final set of meetings in Sydney. The discussions were serious, animated, and enlightening. The visits to the various states were extremely helpful in getting a rounded picture of educational developments from a different point of view. We were there at an interesting time when legislation to establish a new overall commission on tertiary education was working its way through the parliament and was approved shortly after we left. We draw no connections between our discussions and the completion of the legislative process.

We were fortunate that a member of the U.S. group, Barbara B. Burn of the University of Massachusetts, agreed to write a commentary on our discussions and that Peter Karmel agreed to write a note from the Australian point of view. Both these documents are put together in this publication. Educators interested in the way in which three countries deal with the complex problems of managing higher education in federal systems will find these two papers of considerable interest. The ICED is happy to arrange for their publication.

James A. Perkins
Chairman
International Council for
Educational Development

November 1977

THE CHANGING BALANCE IN FEDERAL-STATE RESPONSIBILITIES:

Postsecondary Education in Australia and the United States

Barbara B. Burn

Introduction

In both Australia and the United States, two federal countries, the appropriate roles for state and federal governments in postsecondary education is an issue of increasing urgency. Australia appears to be moving toward greater centralization in an effort to bring more rationalization to postsecondary education. The "New Federalism" policy of the Commonwealth government and the development of state coordinating machinery, now in two states and likely soon in three more, represent a countervailing tendency. The federal era of the last two decades is giving way to a new phase in which initiatives are more likely to come from the states, although a sustained federal role continues to be important in strengthening equality of opportunity for access, supporting centers of excellence, and balancing out regional and inter-state disparities in general support for postsecondary education.

The two countries experienced a rapid expansion of enrollments in the 1960s and early 1970s which has now leveled off in the United States and slowed down in Australia, although

for somewhat different reasons. Various critics of higher education in both countries are proposing that more priority be accorded to youth who do not enroll in colleges and universities and who face critical unemployment problems rather than to higher or postsecondary education.

In the context of such circumstances and attitudes, ten North American (one Canadian and nine U.S.) and 14 Australian higher education experts engaged in a ten-day seminar, held March 22-April 1, 1977 in Australia to examine the "Changing Balance in Federal-State Responsibilities for Postsecondary Education in Two Federal Systems: Australia and the United States."* After three days in Canberra the North American participants pursued their inquiry into the Australian scene through small group visits in Melbourne, Adelaide, and Hobart, then reconvened with their original Australian colleagues for a three-day plenary session in Sydney. Jointly organized by the International Council for Educational Development and Australia's Universities Commission, the seminar was funded by the Carnegie Corporation of New York, the Australian government, and the Australian institutions that sent participants to the seminar.

As did the seminar, this report focuses more on the Australian scene than the American, partly because the Australian locus prompted more concern with Australia, partly because questions of federal-state roles may be in more flux in Australia than in the United States. However, with the increasing questioning of the federal role in the United States, this situation may soon change. The report discusses in turn the environment of higher education, its overall structure, access and enrollments, finance, employment and higher education, research and excellence, community orientation, and coordination and rationalization. The conclusion is particularly concerned with this last topic.

Current problems in higher education in Canada were im-

* The participants are listed in the Appendix.

pressively articulated by the very able Canadian member of the North American contingent. However, because concern with the United States and Australia dominated the discussion, this report on the seminar does not include Canada. Nonetheless, the special circumstances and perspective of Canada greatly enhanced the seminar discussion, putting issues in a broader perspective, widening the comparative base, and enlivening and enlightening the consideration of major issues.

Finally, it must be emphasized that this report was written mainly by one of the U.S. team members, on the basis of impressions gained in a brief visit in Australia. Whatever omissions and distortions it contains should be seen in this perspective.

Federal and State Roles in the United States: An Overview

Neither in Australia nor the United States does the constitution grant authority over education to the federal government. The U.S. entered the field of education, including higher education, mainly through the "spending power." The power of the Congress "to provide for the . . . general welfare" has been interpreted as permitting it to authorize expenditures for education, and in so doing to regulate behavior indirectly by setting conditions for the eligibility or receipt of aid. An increased federal role also has emerged in connection with the "due process" and "equal protection" clauses of the Fourteenth Amendment. The federal role in higher education in the United States is extraordinarily complex, involving some 350 programs and 24 federal agencies. Activities fall into the following areas of concern:

1. The establishment of new institutions has been stimulated by the federal government, most notably the land-grant colleges as a product of the Morrill Act of 1862 and later of 1890.

2. Federal support of scientific research in the univer-

sities started in agriculture with the 1887 Hatch Act and remained almost entirely concentrated in agriculture until World War II, when it was decided to use university facilities for federally supported research. In the postwar period the federal government funded major research efforts through or in association with the universities, in effect buying research to meet specific national needs and also to increase knowledge in the broad national interest, a distinction often blurred in practice. A major factor in the development of a number of world class universities in the United States was federal support of research in a relatively few institutions.

3. Federal assistance to students goes back to World War I, with educational grants for wounded veterans. After World War II federal aid to students through the G.I. Bill of Rights financed 3.5 million veterans, and since 1947 has contributed to international education through the Fulbright Program. After Sputnik in 1957, federal aid supported students in fields deemed important to the national interest through the National Defense Education Act of 1958. The Higher Education Act of 1965, and especially the Education Amendments of 1972, authorized new needs-based direct support of students aimed at strengthening equal opportunity for higher education on the theory that this is a national priority that cannot be left entirely to the states. A new federal program authorized in 1972 is directed toward encouraging state student aid programs. Another important rationale for aid to students is to encourage student mobility and hence institutional diversity.

4. Federal support for campus buildings, first launched during the 1930s depression, involved a major federal commitment in the 1950s and 1960s, and was significant in enabling the higher education institutions to

cope with the more than doubling of enrollments during the 1960s.

5. Apart from the foregoing, federal aid has provided support to meet special manpower and other needs. These have included medical training, vocational education in many community colleges, community service projects, library assistance, the strengthening of developing institutions (primarily the black colleges), and innovation in higher education through the Fund for the Improvement of Postsecondary Education set up in 1972.

6. As in Australia, the U.S. federal government has funded military service academies as well as certain other special purpose institutions—Howard University and the land-grant institutions.

7. State planning and coordination have been a recent focus of federal funding; the 1972 Education Amendments included grants to states to encourage the establishment of broadly representative bodies to stimulate state efforts in this field.

8. An important federal strategy has been tax concessions to encourage private support of higher education through tax exemptions to the institutions and the deductibility of charitable donations.

9. The federal regulatory role has also affected higher education. Affirmative action requirements since 1972 in particular call for nondiscriminatory hiring on the basis of race and sex, and the monitoring of institutional compliance with these and other regulations has provoked a major reaction from the institutions.

10. As the federal role has expanded, federal courts have come to play an increasing part in higher education (in marked contrast to the Australian scene). Involved are such issues as the participation of different

groups in decision making, the legal status of public and private institutions, and, most currently urgent, the question of whether preferential admissions systems for minorities violate the equal protection clause of the Fourteenth Amendment.

The responsibilities of the states involve 13 different areas:

1. Basic institutional support of public institutions, and in about half the states limited basic support to private institutions;

2. Encouragement of the private sector; ⅔ of the states now help private institutions directly or indirectly;

3. The promotion of research, especially in agriculture, veterinary medicine, and forestry;

4. Student support mainly through the subsidization of the cost of education (low tuition fees) and also through grants and guaranteed loans;

5. Grants and loans for construction of student housing and academic buildings; more for the public than the private institutions;

6. Contracts with institutions to provide consulting, applied research, and other services;

7. Contracts with private institutions to operate professional schools;

8. Encouragement of the public services of higher education institutions;

9. Increasing importance of the planning and coordination of state systems of higher education. Voluntary systems are giving way to compulsory, as the inadequacies of the former to cope with the problems of reducing facilities, terminating or consolidating problems, and phasing out institutions, become more critical and difficult. The growing role and expertise of the staffs

of coordinating bodies—and of state legislative and executive bodies—are moving higher education management to a new dimension of professionalism as well as bureaucratization;

10. State regulations on collective bargaining, affirmative action, and other issues;

11. The chartering of institutions and the licensing of institutions to grant degrees, including not just higher education but other types of postsecondary education institutions;

12. The approval of programs and regulation of degrees;

13. Maintenance by state authorities of law and order in the higher education institutions and their communities.

Whereas the ratio between federal and state support of higher education in 1929 was respectively 9% to 91%, it is now 45% to 55%. Including private support the present ratio is 43% state, 32% federal, and 25% private. The federal focus is on student assistance and graduate training, research (both general and mission-oriented), and project support to meet manpower requirements and other special purposes. The states principally support the capital and recurrent costs of higher education—mainly public but also private—student expenses, and planning and coordination.

Since about 1940 there has been a great increase in both federal and state responsibilities for higher education, with a greater relative increase in the former. The public's expanded expectations of the services which government should provide, the growth of a national consciousness through improved communication, and the increasing complexity of national problems have all made for greater centralization. At the same time, however, a widespread disillusionment with big government and the feeling that Washington has too much power are

and will continue to be forces opposing and perhaps even curtailing a larger federal role. Whereas in 1968 it was predicted that there would be almost total federal funding for higher education by the year 2000, now it appears unlikely that this will approach, much less surpass, 50% of all public support.

Federal and State Roles in Australia: An Overview

Until 1950 the federal government played a very limited role in higher education—almost all of which is public. The chief exceptions were modest Commonwealth support after 1936 of university research in the sciences (at the request of the Australian Vice-Chancellors' Committee), the establishment by the Commonwealth in 1946 of The Australian National University as a national center for research and scholarship, and, in the immediate postwar period, Commonwealth funding of veterans' fees and living allowances and grants to the states to help them meet the needs of the universities resulting from their expanded enrollments. The student aid was made possible by the 1946 constitutional amendment which authorized the Commonwealth government to assist students.

The enlarging federal role since 1950 has come about to a considerable extent at the urging of the universities themselves: 1951 legislation to continue the postwar Commonwealth support, and the establishment of the Murray Committee which in 1957 recommended the establishment of the Australian Universities Commission (AUC) and the provision of federal funds on a matching basis with the states for universities' recurrent and capital costs. A major step in bringing an enlarged federal role involved the AUC's Martin Committee on the Future of Tertiary Education in Australia. Its recommendations in 1964 for Commonwealth funding of all tertiary education and the establishment of a federal body to coordinate Commonwealth funding of the existing three sectors—universities, senior technical institutions, and teachers colleges—were im-

plemented for the senior technical institutions (renamed colleges of advanced education or CAEs) with the establishment in 1965 of the Commonwealth Advisory Committee on Advanced Education, paralleling the AUC.

Since then the nonuniversity sectors of tertiary education were redefined. A number of teachers joined with technical institutions, thus becoming parts of the new CAEs, and in 1973 the continuing single purpose teachers colleges moved out from under the State Departments of Education and achieved college of advanced education status under umbrella boards of advanced education (State College of Victoria or SCV in that state). Recognized in the new third sector of tertiary education (not mentioned in the Martin Committee proposals) were the Technical and Further Education (TAFE) institutions administered by State Departments of Education and offering both secondary and postsecondary courses. It is interesting that more than a decade after the Martin Report, in 1977, the Commonwealth is establishing a variant of the Martin Committee-proposed body, the Tertiary Education Commission[1], and that it differs importantly from a similar body which the Whitlam Labor government shortly before its dissolution in late 1975 had intended to create to coordinate the universities and CAEs, not TAFEs.

Various noteworthy developments in the years since the Martin Report significantly altered the Commonwealth's role in postsecondary education and portend a quite different federal-state relationship with the new Tertiary Education Commission. As of 1974 the federal government took over complete financial responsibility for the universities and the colleges of advanced education, and announced the abolition of

[1] The establishment of the Tertiary Education Commission was formally authorized by Parliament after this report was written, and hence is referred to in the report as imminent rather than existing. Under it are three committees on the Universities, Advanced Education, and TAFE, successors to the three Commonwealth Commissions mentioned in this report.

all tuition fees. This made the universities and CAEs almost totally dependent financially on the Commonwealth. It also rendered unnecessary the AUC's (now UC) consultations with the state treasuries, which in fact by then shifted in focus from mainly ascertaining what level of total funding would best facilitate the plans of the state—and the universities—to advancing Commonwealth concerns. Although in principle the universities are autonomous and, except for a few earmarked grants in the last few years, receive lump sum rather than line item budget support from the Commonwealth for recurrent costs (building projects require individual UC approval), tuition fees provided about 15% of their recurrent income and at least the appearance of institutional flexibility.

Since the establishment of the Advisory Committee on Advanced Education, the Universities Commission has been required to consult with it and its successor since 1971, the Commission on Advanced Education, on the coordinated development of the universities and the colleges. Implementation of the Martin Report involved the establishment at the state level of coordinating bodies for the colleges. About 20 in 1964, the colleges numbered over 80 in 1977, including the single-purpose colleges of education.

In the third sector of postsecondary education, technical and further education (TAFE), in which there are 180 institutions with some 500 branches or centers in outlying communities, an expanded federal role has also developed. Although, in contrast to the universities and the colleges of advanced education, TAFE is mainly funded by the state governments (about 80% state, 20% federal), a Commonwealth coordinating agency is now involved. It is the Technical and Further Education Commission, set up in 1975, as the successor to an earlier advisory committee appointed in 1973. However, because TAFE is still very much under the direction of state departments of education or of technical education, the Commonwealth role in relation to TAFE and in coordinating their development with the UC and CAE has been limited. With

more support for TAFE becoming a Commonwealth priority, these relationships may change.

As the role of the Commonwealth government in postsecondary education in Australia has enlarged, though relatively less for TAFE, the part played by state governments has diminished. Constitutionally, education, including postsecondary, falls under the state government and is the concern of the State Ministers of Education. Since state funding of the universities and CAEs came to an end, state governments have had a minimal part to play in university affairs, even though the Universities Commission has regularly consulted with state officials. State coordinating bodies for the colleges by contrast have an important function in negotiating with the colleges, state ministries, and the Commonwealth Commission, and in several states served as an active force in the federal-state-institutional triangle. Federal funds to all three sectors are provided to the state treasuries, which in turn disburse them to the institutions, but exercise no discretion at this point.

As the foregoing discussion suggests, a fundamental difference between the state-federal roles in Australia and the United States in funding higher education is that in Australia the federal government is responsible for general funding, in the United States for categorical funding. The possible impact of the new Tertiary Education Commission on all this in Australia will depend very much on how it operates and whether there are any changes in funding arrangements and matters yet to be defined. It is hoped that this study, based on the Australian-U.S. seminar, may provide some useful perspectives.

Environment of Postsecondary Education

In geographic area, Australia and the United States are of approximately equal size, the chief difference being that the center of Australia is sparsely populated "outback" and desert, in contrast to the cornbelt and Mississippi River Valley in the

United States. Australia's population of 14 million is concentrated in coastal cities, especially in the east and south, and is thus largely urban, whereas the over 200 million population of the United States is more broadly dispersed. In scope and geographic location, the higher education system of Australia is more limited, more urban-oriented, and in some ways more visible and vulnerable to local political forces. This latter circumstance is exacerbated by the fact that whereas the United States is comprised of 50 states, in Australia there are only six, so development in a single state may obtrude more on the national consciousness than in the United States. The role of state governments in any field, including higher education, is likely to be more noticed and hence more under fire when the states are few than when they are many.

The egalitarianism which is such a profound tradition and force in Australia tends to preclude any deliberate differentiation in public policy relating to social institutions, including higher education. This egalitarianism is mirrored in a dedication to equal if not equalizing treatment which makes for uniformity, homogenization, and, as a by-product, an increasing centralization of policy and administration. The lack of a political tradition of local involvement and control—with schools or most other community-centered activities—reenforces egalitarianism, uniformity, and centralizing drive. This centralizing effect exists alongside of, and seems difficult to reconcile with, the fact that Australians are by inclination and history relatively immobile across state boundaries. In two of the six states there is talk—not altogether facetious—of secession, and young people very rarely enroll in higher education outside their home state. The combination of significant inter-state differences and Commonwealth-wide egalitarianism clearly has important implications for the roles of federal and state governments in higher education.

An aspect of egalitarianism which is hardly mirrored in the United States is the view that all states should be in a position to provide equal standards of public services. This view is re-

flected in the activities of the Commonwealth Grants Commission which recommends special disability grants to the states to take into account the lower taxable capacity and the higher cost of services in the less wealthy and more sparsely populated states.

The situation in the United States contrasts sharply with that in Australia. The numbers of people and of higher education institutions, the broad geographic spread of the population, the fact of 50 states, and an acknowledged if not necessarily greater diversity within the population, are major forces for decentralization. A tradition—if not myth—of local control, well epitomized in the New England town meeting, delays or somewhat offsets political centralization. Geographic mobility is embedded in the American way of life, and egalitarianism or equal opportunity flourishes more in diversity than in identity of choice. In higher education the parallel existence of public and private sectors (in Australia the private institutions are too few and weak to shape the identity of the system) is integral to the diversity in American higher education. Another distinction is that the higher education systems of the 50 states vary so enormously in institutional array, coordinating arrangements, public and private support, and other aspects. However, Australia has its own inter-state diversities. Even more important to diversity in the United States may be the existence outside the formal postsecondary education system of a variety of proprietary and other institutions offering postsecondary programs, e.g. in industry and labor.

In terms of enrollment demand, Australia and the United States face somewhat similar futures despite their different circumstances. In both there is a disenchantment with higher education in terms of its expansion contributing to the widening of opportunity for higher education or subsequent employment or to economic growth nationally; the concern about under- or unemployed graduates is probably high in Australia, though it is significantly less than in the United States. Student

activism in the late 1960s added to the legacy of disenchantment with higher education, and both countries are now looking more to vocational education and are questioning the content and aims of general education in higher education. While in the United States the decline in the college age group has already begun to be felt, demographic trends in Australia promise to maintain or expand the demand for higher education. However, in both countries current and anticipated vicissitudes in the economy will limit the resources available for higher education so that the rising rate of public support which characterized the 1960s can no longer be maintained.

The political structures of Australia and the United States are denoted respectively by parliamentary-prime minister and presidential-separate powers. As mentioned earlier, both are federal systems with education falling in principle under the jurisdiction of the states, but in practice shifting increasingly to the federal governments because of their spending powers and other constitutional provisions.

Turning specifically to the higher education scene, the United States and Australia have in common a quadrupling of enrollments since the early 1950s (to include around 20% of 17-22 year olds in Australia and around 33% in the United States), and significant disparities among the states in rates of enrollments and in the mix of different kinds of institutions. Thus, in the United States the community colleges are stronger in California than elsewhere, while private higher education is much stronger on the east coast than in the far west. In Australia, TAFE is more developed in South Australia than in Queensland; the Colleges of Advanced Education more in Victoria and Western Australia than in some other states.

A major difference between the two countries lies in secondary school completion rates. Some 20% in Australia 15 years ago, it is now about 35%, as contrasted with 78% in the United States. Access to higher education and the role it plays in employment and life expectations thus differ markedly between the two countries, being more professionally oriented

and elitist in Australia, while involving more diverse aims, content, expectations and outcome in the United States. In both countries graduates have a lower unemployment rate than nongraduates, although the rate is disturbingly higher than a few years ago.

A significant dilemma shared by Australia and the United States, although for different reasons, is that of identifying what higher education is. Australia was among the earlier countries to substitute the word *tertiary* for *higher*. In recent years the phrase *postsecondary* has gained increasing usage in the United States. With the shift from elite to mass and now close to universal higher education in the United States, the appropriateness of the word *higher* is increasingly questioned as postsecondary institutions may offer what is basically secondary level, and open admissions institutions may not require the completion of certain prescribed college preparatory studies typical of the elitist tradition in education. The separate chronological, curricular, and institutional distinctions between secondary and postsecondary education have eroded.

In Australia, with the emergence of CAEs and TAFE as part of tertiary education, the upgrading of teacher and technical education, and the fact that both Master's and college preparatory work are offered in some CAEs, distinctions between higher, tertiary and postsecondary are increasingly unclear. The situation is further complicated by the fact that TAFE institutions offer both secondary (postcompulsory school age or postschool) and postsecondary studies. The conventional meaning of tertiary until recently in Australia involved universities and CAEs only. That the new Commonwealth Commission is called Tertiary, but includes TAFE, involves a redefinition of the word tertiary so that it is probably no longer higher than postsecondary. For simplicity, this study mainly uses the phrase "postsecondary."

In both countries it is accordingly not easy for federal or state authorities to determine policies and funding levels for postsecondary education on the basis of the nature and level

of institutional or curricular distinctions. In Australia solutions appear to be sought through forcing the institutions into separate categories which, despite the great variety within each, can then in principle be treated equally. In the United States, on the other hand, the erosion of clear distinctions between kinds and levels of postsecondary education is an integral feature of the on-going diversification, adaptability, and often upward mobility of programs and institutions which enables them to respond to shifting priorities in policies and funding. Perhaps at times they respond too readily.

Structure of Postsecondary Education

In the 12 years since the Martin Report, Australian postsecondary education has been dramatically transformed. The system then involved a dozen universities, most located in the capital cities, together with a medley of state-dominated technical institutions and teacher training colleges. The latter were in the process of extending their two-year programs to three years, the former were vocationally oriented and enrolled large numbers of part-time students. The gap between these institutions and the universities in funding, autonomy, and prestige was immense. By early 1977, when the Australian-North American Seminar met in Australia, the picture had changed drastically.

Postsecondary education in Australia now comprises three sectors—university, advanced education, and TAFE. Allegedly clearly differentiated, in fact that is not altogether the situation. The 19 universities deal directly and almost exclusively with the Commonwealth's Universities Commission, which gives them block grants for recurrent costs and equipment and itemized grants for capital expenditures; it recommends block grants for building expenditures for particular projects defined in terms of space and/or student parameters. In theory the Commission concedes to the universities full authority on how they allocate the recurrent grants, except for projects

which are particularly costly or may involve a major new departure or duplication. In practice funding is guided partly by the size and history of the institution but mainly by weighted student unit costs, the definition of which remains deliberately obscured lest the Commission lose its flexibility; the universities have rigid expectations, and university funding becomes formula-driven. As part of their autonomy the universities select their own vice-chancellors and staff, determine their own admissions and other policies and courses, and determine and award their own degrees and diplomas. The UC does not dictate enrollment levels although it has prescribed enrollments in aggregate terms and recommended grants in relation to these aggregates. Although the universities are considered theoretically equal in terms of function, status, and quality, and tend to be more like the British "red brick" than other models, actual differences among them are acknowledged, especially between the newer and the long established. The Australian National University is unique in its federal origin and dominant postgraduate and research emphasis.

The 80 some Colleges of Advanced Education, although as mentioned earlier treated as a single sector (except in Victoria), comprise an extraordinary diversity. They range from long-established, multipurpose institutions offering graduate study and academic programs of comparable quality to the universities, to single-purpose teacher training and technical institutions enrolling only a few hundred students. Some 40% of all CAE students are in the nine DOCIT institutions (Directors of the Central Institutes of Technology), and these offer not only associate diploma, diploma and first degree courses, but also Master's degrees. CAE enrollments in 1976 were about 135,000, while there were approximately 153,000 students in the universities. Supposedly the CAEs are more vocational, responsive to community needs, and involved with applied rather than theoretical knowledge, and, though different from, are not inferior to the universities. In actuality a clear-cut rational differentiation of the colleges from the universities is

difficult whether on the basis of the kinds of students, close relations with commerce and industry, research concerns, or vocational orientation.

Their funding and overall functioning is, however, far less autonomous. Funds are recommended for the individual CAEs by the Commonwealth's Commission on Advanced Education on the basis of enrollments in courses which the Commission must approve as meeting community need and not involving undesirable duplication; capital projects are also taken into account. The Commission's functions are paralleled at the state level by advanced education coordinating boards which may find the leverage of the Commonwealth Commission useful, or may regard the Commission as complicating, delaying, and duplicating work which it believes itself better equipped to handle.

With postsecondary enrollments growing less rapidly, and in particular with a current surplus of teachers, the role of those CAEs which are mainly teacher training institutions has become ambiguous. There is growing concern that to maintain their enrollments they are taking on programs more appropriate to the universities on the one hand and to the technical institutes on the other. Thus, it is alleged, CAE's are poaching in these areas for which they are not sufficiently equipped and creating conflict and duplication.

Technical and Further Education, officially the newest sector, enrolls several times more students than the universities and CAEs combined. But as enrollment figures involve a significant amount of duplication, many involve very short courses, and the dropout rate is high, comparisons must be treated with considerable caution. For 1976 TAFE enrollments were a cumulative 762,000 of which 213,000 were in adult education courses (many of a hobbyist nature), and 106,000 in preparatory courses basically at the secondary school level. The total TAFE enrollment for 1976 was in all probability under 100,000 full-time equivalent. Over half of TAFE students are over 22 years of age; 90% are part-time

or in correspondence courses; 80% are in vocational courses. The TAFEs pride themselves on responding to community and employment needs and in offering further education opportunities to the 65% of young people who leave secondary school early. Less than half of TAFE courses have formal entry requirements, although many of the paraprofessional courses do require completion of year ten at secondary school. There is far more diversity among TAFE institutions than lumping them together in a single sector implies. They tend, however, to be less comprehensive than some of the advanced U.S. community colleges.

Because of their enrollment numbers, claimed relevance to employment, and wide dispersal throughout the country, TAFE institutions may derive a degree of political power from these circumstances. Most are now firmly in the control of state departments of education (technical education in South Australia and New South Wales) and are subject to relatively centralized regulations and decision making on courses, staffing, and resource allocation. The Commonwealth Commission for TAFE has little impact on the foregoing items but plays an important role in capital expenditures and special improvement programs and courses.

The three sector postsecondary system in Australia can be said to have a counterpart in the United States which has three basic categories of institutions: the universities, four-year colleges, and two-year colleges. There is considerable diversity within each category. The parallel does not go much beyond this, however, because of the absence in the United States of national coordinating bodies that fund basic operating costs, wide variations in program and financial coordination among the states (coordination of all public institutions in some and coordination by types of institutions in others), a considerable degree of autonomy within the institutions in determining academic programs and staffing, and, of course, the almost complete autonomy of private institutions even when they receive state funding.

A greater degree of pluralism and diversity in U.S. higher education reflects several other features which distinguish it from the Australian. Whereas in Australia salaries are determined on a national basis for all higher education institutions (with the exception of TAFE) by the Academic Salaries Tribunal, and are mostly uniform across the country, with parity between the universities and CAEs in the middle and bottom grades (colleges have a more expanded scale within this range), no such national salary system exists in the United States. Only within the states, and there to a limited extent, are salary ranges set. The competition between institutions thus can include a bidding process in recruiting faculty, which makes for considerable faculty mobility and reenforces interinstitutional diversity.

A second factor contributing to the pluralism is a tradition of community control and responsiveness for the community-based postsecondary institutions, for example, the city colleges, universities, and community colleges, especially those falling under community college local districts. The variety of funding sources supporting U.S. higher education also creates diversity and pluralism; the availability of private support in the United States is an element negligible in the Australian scene. Private support is a vital element in financing U.S. higher education, not only through tuition fees charged to parents, but also, and more important, in private philanthropy from individuals, corporations, and foundations. The last two provide 10-15% of higher education's income.

Postsecondary Education Coordination

The three Commonwealth coordinating commissions for higher education in Australia are statutory advisory bodies appointed by the Governor-General, and are responsible to the Commonwealth Minister of Education. They are therefore more autonomous in relation to the Commonwealth Government than

is the U.S. Department of Education, and less susceptible to political forces. Each commission advises the Commonwealth Government on financial grants to the institutions in its sector, although the TAFE Commission (TAFEC) recommendations differ in having to take into account the primary responsibilities and support of state governments for TAFE. Each commission is required to consult with the others as well as with state bodies and the institutions themselves. Balanced development of the institutions and greater rationalization of resources are major concerns, the latter increasingly so in the last several years. The commissions' recommendations are made not only on the basis of these consultations, but more importantly within guidelines set forth by the Commonwealth Government in 1976. These relate to the funds for recurrent and capital expenditures to be made avaliable by the Commonwealth, enrollments in each sector, growth rates, and the like. The federal treasury is closely involved in the preparation of these guidelines.

An example of the critical role played by the Commonwealth Government was its decision in 1976 to shift from a triennial to a "rolling" triennial basis for funding postsecondary education. It now gives the commissions firm figures for expenditures for only one year at a time, thus being little different from annual budgeting and with the added problem of requiring annual submissions from the commissions in accordance with annual guidelines from the Commonwealth Government.

University coordination at the state level has been extremely limited, and is neither an aim nor product of the periodic meetings of university vice-chancellors in those states having more than one university. TAFE coordination at state level is a function of the state departments of education or technical education. Arrangements for CAE coordination vary among the states, from (1) a single board as in Queensland, and (2) two bodies in Victoria with its Institute of Colleges for Technical Education and Victoria State College for teacher

training institutions, to (3) a governing body of the single CAE in a state advisory to government as in Tasmania.

A growing trend is the establishment of coordinating bodies which embrace the universities and CAEs; they recommend to the state Ministers of Education on the development of existing institutions, the establishment of new programs and institutions, and on other matters related to postsecondary/higher education. Western Australia had this to some extent in its Tertiary Education Commission, newly replaced by a stronger Post-Secondary Education Commission. In New South Wales a Higher Education Board in 1976 replaced the Advanced Education and Universities Boards and the Higher Education Authority, and the new position of Under-Secretary in the Ministry of Education was set up to advise the Minister for Education on all education, including postsecondary. In Tasmania an advisory committee on postsecondary education to the Minister of Education is likely to be set up as a result of the recommendations of a committee of inquiry chaired by Peter Karmel, chairman of the UC.

Committees of inquiry have been extremely influential in designing the structure of postsecondary education in Australia at both the state and Commonwealth levels. In fact, they have been such a common phenomenon that some Australians feel they may represent a strategy for postponing rather than solving problems. Committees of inquiry are now looking at postsecondary education in Victoria and South Australia, and a major national Inquiry into Education and Training is in process by a committee chaired by Bruce Williams, vice-chancellor of the University of Sydney.

Postsecondary education coordination at the state level is destined to be affected by the establishment of the new Commonwealth Tertiary Education Commission. In replacing the Universities, Advanced Education, and TAFE Commissions, which then become Councils of the Commission, intersectoral coordination and rationalization appear to be a major goal. As is discussed later, the Commission's effectiveness may be

seriously hampered if parallel coordinating bodies, which include TAFE, do not exist at the state level.

Higher education coordination in the United States is both simpler and more complex. Having neither goals nor management, it is as diverse as the 50 states themselves. Twenty-nine states have coordinating boards which stand between the universities and colleges and their governing bodies, and the state government. In-between kinds of agencies, these boards mainly review and coordinate information in what are basically decentralized state systems. In 19 states single governing boards for all the public higher education institutions in the state (except the community colleges in a few cases) function as if the higher education system were a single university, and have considerable control over institutional governance. Unlike the situation in Australia, the state legislative and executive branches review proposed postsecondary budgets (or selected parts of them) in great detail and often publicly; both often collect considerable data apart from what is submitted by state coordinating agencies. The normal sequence is for the proposed budget to be first subjected to the executive branch whence it goes (but not necessarily balanced) after much scrutiny and probably some major changes, to the legislature. The system of intensive legislative hearings and lively and often ruthless interaction between the legislative, executive and higher education staffs has no counterpart in Australia, as the various state and Commonwealth coordinating bodies have carried out this function in behalf of government.

Coordination in the United States involves more overt formulae than in Australia, possibly a result of a greater emphasis on program budgeting as a necessary strategy to cope with institutional diversity. Formulae are devised in terms of staff/student ratios and student credit hours (variously computed) which take physical space, enrollments, teaching loads, and overheads into account, and may provide overlay precise-appearing unit cost indicators for levels of funding. As in Australia it is difficult to reconcile quantitative formulae wit

the need to encourage innovation and inter- and cross-disciplinary efforts, and generally to strike the right balance between traditional structures and goals and changing missions and whatever structural changes they require. The program review function of the state coordinating agencies is akin to the approval authority of the Commission on Advanced Education for new courses in Australia and of the UC for major changes in the universities.

Coordination of postsecondary education at the federal level mainly exists in the U.S. to the extent that various federal programs and agencies encourage the states to strengthen postsecondary education planning and coordination, and facilitate this by collecting and analyzing basic data which provides a stronger foundation for coordination and planning at the state level. Federal coordination also takes the form of support of special programs and disciplines.

Financing of Postsecondary Education

Until 1974 financial support for postsecondary education in Australia was shared by the state and Commonwealth governments. The new Labor government took over total financing that year, along with abolishing tuition fees and expanding and democratizing student aid. The present government has proposed a policy of a so-called "New Federalism" to give the states income tax points so that they can fund programs within their borders if federal funding is insufficient. This proposal has met with a degree of cynicism. On the one hand it is asserted that the Commonwealth Government really wants to cut support for the public sector, and that the New Federalism would provide a vehicle for this, especially as the state will not have the political courage to collect income tax, a right which they gave to the Commonwealth in 1942 under the exigencies of World War II. Or, some claim, under the New Federalism the states will be asked to pay for what amounts to Commonwealth policies.

Advocates of the New Federalism argue that it will enable the states to control their own expenditures programs as they would then have some power of the purse to watch their constitutional responsibility for education, including postsecondary. The states would no longer have the alibi of lack of funds for failing to undertake various measures; until now this has enabled them to blame the Commonwealth instead of taking responsibility themselves. In this connection it is worth noting, however, that when the universities were jointly financed by the Commonwealth and state governments, not all the states put up the maximum funds needed to obtain matching Commonwealth support, and they could even now provide funds over and above the Commonwealth ones to postsecondary education, if they wished.

At present 89% of university funding (excluding Commonwealth financial support for students) is dependent on the Universities Commission; the other 11% comes from a mixture of the Australian Research Grants Committee, medical research grants, state contracts, and private sources, for a total of about 95% from Commonwealth sources. The CAEs are 99% dependent on Commonwealth funding. TAFE about 20%, with 80% from the states. Commonwealth support for TAFE in 1977 (December 1975 prices) involved $25 million in general purpose recurrent grants, $13 million in special purpose recurrent grants, and $35 million for specific building grants. Should postsecondary funding again become a shared Commonwealth/state matter, it is possible that the states would insist on a stronger policy role in shaping postsecondary education although with the end of shared funding the states in fact continued to have a major influence in decisions. The homogeneity developed among the states might then diminish, and the new Tertiary Education Commission would have a concomitantly more influential role (the UC's influence declined after the Commonwealth took over all postsecondary funding, and by setting up the other two postsecondary Commonwealth Commissions diminished the uniqueness of the UC.

although significant major changes seem unlikely). The proposed New Federalism policy was expected to be clarified in mid-1977.

Postsecondary financing in the United States is almost opposite to that in Australia. Basic operating and capital costs are supported by the states, and the share of federal/state expenditures on postsecondary education is in a ratio of about 45/55. Of the federal funds, 60% is for access, i.e. scholarship and other aid to students, not to the institutions directly. About 30% goes to research, and the remaining 10% involves tax deductions and the like. Federal support is categorical and hence apt to be volatile, available for programs deemed in the national interest. Because this shifts as national interest shifts, it is lacking in predictability and reliability. State support is enrollment-driven for the most part. With a 15% enrollment decline in higher education predicted between now and 1983, should funds for higher education not be reduced proportionately, relatively more may be available to higher education than now. Public funding of private higher education has been increasing and now involves one fifth of that available to the public institutions. In fiscal 1976, tuition and fees at public institutions accounted for 13.1% of total current fund revenue in contrast to 36.8 for the private institutions.

In the United States as in Australia, problems of unemployment, inflation (14% in Australia, about 6% in the United States), and increasing demands on resources from other social programs have meant that public support of postsecondary education cannot sustain the continued rate of growth of the 1960s. In the United States, the percentage of the GNP going to higher education has already leveled off and is beginning to decline, as is the proportion of state revenues going to higher education. As in Australia, rationalization is the order of the day, although in both countries local political pressures in support of local institutions impede such rationalization. Despite the U.S. lack of the centralization which characterizes the Australian scene and theoretically should facilitate decisions

to amalgamate and eliminate institutions, such measures may be proceeding more ruthlessly in the United States. For example, in New York State a body has been created with the mandate to make recommendations on when individual institutions cease to be viable.

Access to Postsecondary Education

In 1974 the then Commonwealth Minister for Education in Australia affirmed the government's commitment to the "goal of promoting equality of educational opportunity for tertiary students." To strengthen equal opportunity the Commonwealth Government in 1974 abolished tuition fees. It also replaced the former federal scholarship program, which was based on academic merit, with the Tertiary Education Assistance Scheme (TEAS). Under TEAS full-time students in approved courses receive assistance on a means-tested noncompetitive basis without age restrictions. Excluded are teacher trainees supported and bonded to employment after graduation by state government—some 50,000 in 1974. However, in a few years bonded scholarships for future teachers are expected to be terminated. The Commonwealth also has special student assistance programs for aborigines (in 1971 only 1% of all aborigines had completed secondary school), soldiers' children, widows, and other disadvantaged groups.

In principle no qualified young person is denied opportunity for postsecondary education due to lack of finance. However, persons wishing to enroll in another state or on a part-time basis are not eligible for Commonwealth aid. Also, consideration is now being given to loans as an alternative, or, more likely, a supplement to grants; students complain that the maximum grant under TEAS is below the poverty line.

Important to extending equality for postsecondary education has been the expansion of the system. Without the extensive network of CAEs, many students enrolled in them would not have entered tertiary education. The fact that 45% of all

TAFE students are under 22 underscores its contribution to opportunities for postschool education. A 1975 survey of university and CAE beginning students showed that around 15% would not have enrolled if there had been compulsory fees. Furthermore, whereas in 1974 over half of all full-time university students in fields other than education were from professional or administrative families, this was true of only something over one third of CAE education students. Evidently the CAEs have been more instrumental in widening access than have the universities.

Access for women has improved substantially since the early 1960s. Women constituted 23.3% of university students in 1961; in 1976 they were 38%. In the same year women constituted respectively 35% and over 46% of students in TAFE (excluding adult education) and the CAEs. There are no officially legislated affirmative action programs in Australia.

As is the case in many countries, equal opportunity for postsecondary education is very much a function of early socioeconomic circumstances and the quality of elementary and secondary schooling. Thus, in Australia (as in the United States) the less advantaged who complete secondary school have been shown to have equal opportunity for postsecondary education with the advantaged. However, according to the Commonwealth Schools Commission, almost 13% of elementary and secondary school students are in schools classified as disadvantaged, schools which, it is said, therefore handicap students in terms of postsecondary education access. This is not because the schools lack resources but because they are in areas with a high proportion of disadvantaged people as measured by the usual socio-cultural-economic indicators. Finally, with only 19% of 17-22 year olds in postsecondary education in 1976 (undergraduates in the universities and CAEs), it would appear that the opportunity for postsecondary education, even after doubling in the last ten years, remains limited. It is important, however, to recognize the opportunities offered by TAFE at the postschool if not postsecondary level. These

opportunities are somewhat comparable to those offered by the community colleges in the United States.

In the United States it is above all the 22% of young people who do not complete secondary school who lack equal opportunity for postsecondary education; a disproportionate number of them are blacks and other minority group members. However, equal opportunity has been significantly strengthened in the last ten years as a consequence of both federal and state policies and programs, particularly as regards minorities and the poor. The Civil Rights Act of 1964 and the Higher Education Act of 1965 basically provided that students should not be denied access to college because they are nonwhite or come from poor families. A broad consensus reached in the 1960s, which continued into the 1970s, asserted that discrimination based on race is contrary to the Constitution, and that it is the responsibility of the federal government to bring it to an end. There was a further consensus that implementing equality of access was a legitimate and desirable national purpose justifying federal funds and influence to improve the access of educationally disadvantaged groups to good quality education. Black enrollments in higher education increased from 306,000 in 1964 to 814,000 in 1974 and now make up the same percentage of total enrollments as blacks do of the national population. However, blacks still enroll disproportionately more in the lower prestige institutions, have a lower retention rate, and enroll less than whites in graduate and professional studies.

Federal legislation on affirmative action related to sex, set forth in Title IX of the 1972 Education Amendments, prohibits discrimination on the basis of sex. Although information on institutional compliance with affirmative action requirements was not available in early 1977, Title IX and the changing climate regarding opportunities for women were already making an impact on female enrollments in higher education, especially in graduate study and the traditionally male fields.

Access to higher education, irrespective of a person's financial circumstances, is now the focus of federal support of higher

education, and is implemented chiefly through the Basic Educational Opportunity Program under the 1972 Educational Amendments. On the basis of need, students receive grants to cover up to one half of attendance costs for a maximum of $1,600 annually. This program is supplemented by several other federal student aid schemes involving loans and work-study as well as grants. While in 1969-70 less than 5% of students in higher education received direct federal aid, in 1975 more than $6 billion was spread over 7 million student awards, and about one third of all full-time undergraduate degree students are now aided by federal funds.

The role of the states in access is also important. By expanding higher education facilities in the 1960s, the system could cope with the doubling of enrollments in that decade. The combination of open door admissions and low tuition at the community colleges along with federal aid enables all qualified persons to obtain a higher education somewhere. State student aid programs in 47 states provide important support.

The major emphasis in federal support on aid to students rather than to the higher education institutions has not operated long enough to be systematically evaluated. However, it is criticized in some quarters for not providing to the private institutions the support they require if a healthy diversity is to continue to characterize U.S. higher education. Also, student aid does not seek to or succeed in meeting the need to provide the more outstanding institutions with the special support they require if they are to continue as centers of excellence, nationally. This is regarded as a major weakness of current federal funding policies.

Research and Excellence in Higher Education

As we already mentioned, Australian egalitarianism tends to produce equal, if not equalizing, support for the universities in order to foster their equality. Public policy deliberately eschews the goal of a hierarchy of universities with peaks of

excellence among them, though a *de facto* pecking order is said to exist, as much among departments and even faculties as the universities generally. Only 11 or 12 of the universities are full size, and it is difficult to rank them when they are so few. Moreover, the low faculty mobility among universities, partly because of uniformity in salaries across the country, is not conducive to a hierarchical order as salary competition for faculty is not possible. The lack of any significant interstate mobility on the part of students also reenforces the egalitarianism of the national system. As one observer put it, Australian universities are happy to have Nobel prize winners but do not put money into the effort. National policy does not overtly aim at having one or more universities able to compete with the best dozen or more worldwide, although Australia can make this claim.

Graduate education and research only developed significantly in Australian postsecondary institutions after World War II because of the dominance of this field by the Commonwealth Scientific and Industrial Research Organization (CSIRO) and its predecessor organization, the Council for Scientific and Industrial Research, set up respectively in 1949 and 1926. In 1973-74, according to one observer, only about 20% of graduate education and research was carried out in educational institutions, 35% in business and industry, and over 40% in government bodies (30% Commonwealth, 11% state). In April 1976 graduate enrollments in the universities constituted 16.53% of all students, 7.34% in the CAEs where most are in graduate diploma courses in keeping with the professional and vocational orientation of these institutions. For the universities this represents a doubling of the percentage since 1968. An average of 8% of university recurrent budgets is funded by research grants, but this varies from 12% for the university with the greatest research support to only 4% for those with the least.

In recent years the Commonwealth Government has come to dominate the field of graduate education and research, especially since shared Commonwealth-state funding ended in

1974. The establishment of various Commonwealth funding agencies for research has also brought increased Commonwealth domination and coordination of research. The Australian Research Grants Committee, established in 1965, is a major funding source for research, especially in the universities. It awards grants to individual projects and researchers on the basis of their merits. Other major Commonwealth agencies which fund research include the National Health and Medical Research Committee and the Educational Research and Development Committee.

The states accord relatively less priority than the Commonwealth Government to graduate education and research, and as policy and funding decisions have shifted more to the Commonwealth, research may become less responsive to state, regional, and local needs. Whether or not the proposed New Federalism affects this development remains to be seen. Although research carried out in the CAEs is relatively more applied than in the universities and the latter give priority to basic research, the establishment of the new Tertiary Education Commission seems likely to bring yet more rationalization into graduate education and research nationally.

In contrast to Australia, the United States situation in graduate education and research shows a volatility in the federal role, but as in Australia, a dominance of federal over state funding. As the basic institutional support provided to public institutions by the states is enrollment-driven, it is roughly as consistent and predictable as are student numbers. The U.S. situation differs most markedly from the Australian in having a recognized if not explicit hierarchy of institutions. Of the 3,000 some colleges and universities, the doctorate is granted by 254 universities; it is among them that are found the centers of excellence which rank with the best universities internationally. However, their continued excellence is threatened in the case of the public institutions by the leveling impact of unit costing systems as well as the leveling off of state support as higher education receives a diminished priority in competi-

tion with other social programs. By contrast, the more outstanding universities in the private sector are not caught in the bind facing other private institutions of steadily mounting costs with no assurance of proportionate increases in revenue; a combination of internal rationalization and external funding has so far assured their quality and financial viability.

The United States also differs from Australia in the greater concentration of research and development in higher education rather than in government agencies or industry. Some 54% of research and development is carried out in the universities, one third in only 40 of them. The federal government provides 85% of research funds allocated to the universities, 10% comes from private sources, 5% from the states. Thus the university research effort is highly vulnerable to the vagaries of federal funding. These are well exemplified by the increase in federally funded graduate fellowships, from 10,000 in 1960 to 50,000 in 1970 and back down to 10,000 currently. Federal support of university research is now 80% of what it was in real terms at its peak in the 1960s. While this shifting support has not brought any appreciable deterioration in the most outstanding science departments, it is resulting in a curtailment of research programs in those with lower ranking, a general erosion of the research base nationally, and a widening of the gap between the elite and nonelite centers.

Despite the decline in federal support for graduate education and research, enrollments in graduate programs have not dropped except in the hard sciences and engineering, with the consequence that of the 30,000 Ph.D's produced annually, only 15-20,000 are likely to find jobs commensurate with their training. Despite this bleak employment situation, students continue to enroll for graduate study in order to enhance their job prospects, thus causing a "bumping" phenomenon vis-à-vis those with first degrees only.

The continued health of graduate education and research in the United States requires an increase in federal support of basic research at the same rate as the increase in the GNP,

more aid for fellowships and libraries, and the continuance of the peer review system in federal funding of university research in order to preserve institutional autonomy. The states might well provide selective support for graduate education and research and promote regional programs in order to avoid duplication. It is also asserted that higher education institutions themselves should seek new constituencies and functions, expanding, for example, their efforts in applied fields.

Postsecondary Education and the Community

In both Australia and the United States postsecondary education is supposed to respond to community needs, especially as regards employment. Efforts are made with varying success to ensure that the institutions, particularly those regionally or locally based, reflect the interests of their immediate and wider communities.

The 1976 guidelines set forth by the Australian Commonwealth Minister for Education for the 1977-79 triennial reports of the Universities and CAE Commissions made reference to "enabling education programs to respond more quickly to changing community needs." Also, the emphasis on the balanced development and diversification of postsecondary education as part of the mandate of the Universities and CAE Commissions, especially since the Martin Report, implies a responsiveness to societal needs. For the universities this operates in the context of the commitment to university autonomy which is maintained *inter alia* by keeping earmarked grants to a small proportion of total grants for the universities. The Colleges of Advanced Education are explicitly community-oriented, and the objectives of the Commission on Advanced Education include "to ensure the best use of available resources in accordance with community needs."[2]

[2]Specifically, the mandates of the new and former Commonwealth Commission are and were the following:

The public interest is articulated in the formulation of policy for postsecondary education in Australia through the representative on commissions and on governing boards of individual institutions of a variety of outside interests, especially industry. Moreover, a major consideration of the Commission on Advanced Education in approving proposed new courses in the colleges for Commonwealth support is the extent to which they are aimed to meet community needs. The college system as a whole is intended to have sufficient diversity and flexibility to meet changing community needs quickly and effectively. Worth noting also in connection with responsiveness to the community and employment needs is the high proportion of university and college students enrolled on a part-time

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The new Tertiary Education Commission is required under its Act to: "Perform its functions with the object of promoting—

(a) the balanced and co-ordinated development of the provision of tertiary education in Australia; and

(b) the diversifying of opportunities for tertiary education."

The Universities Commission under its Act (now repealed), was required to

"Perform its functions with a view to promoting the balanced development of universities so that their resources can be used to the greatest possible advantage of Australia."

The Commission on Advanced Education under its Act (now repealed), was also required to

"Perform its functions with a view to promoting the balanced development of the provision of advanced education so that the resources of the institutions providing advanced education can be used to the greatest possible advantage of Australia."

The requirement was thus the same for CAEs as for universities. Similarly the Act establishing the TAFE Commission (now repealed) required it to

"Perform its functions with a view to promoting—

(a) the balanced development of the provision of technical and further education in Australia; and

(b) opportunities for all persons to avail themselves of comparable facilities for undertaking of technical and further education in Australia."

basis, many combining their studies with work, about 28% and 31% respectively, in 1975.

At the vocational level the Technical and Further Education sector endeavors to identify and meet employment demands. Associated with TAFE are various committees and advisory bodies to provide advice on the content of vocational courses. These typically include employer organization and trade union representatives. In some states community representatives are members of TAFE institution councils and of state boards or councils on technical and further education. As stated earlier, the majority of TAFE students are in vocational courses, by definition employment-oriented.

In assessing the community-orientation and responsiveness of postsecondary (and postschool) education in Australia, it is important to restate that in fact there is little tradition of local community or government involvement. Local government is relatively weak and is concerned basically with local taxes, trash collection, and other matters. Paradoxically, it is to a large extent through initiative at the state and Commonwealth levels that efforts are made to ensure that the postsecondary institutions are responsive to local needs. Also, postsecondary education development tends to be based more on student demand than on assessed manpower needs. As elsewhere these lack the reliability required if labor market projections are to figure importantly in postsecondary education planning and coordination.

U.S. postsecondary institutions also appoint lay persons to governing boards as a means to include representatives of public interests in policy determination. In the case of the public institutions their charters may specify that particular interests be represented, e.g., for land-grant institutions the state secretary for agriculture, and that the board be made up of residents of the state. The governing bodies of public community colleges are heavily community-dominated. Professional associations are represented in the different accrediting

bodies for the professional programs. Unlike the situation in Australia, a major scrutiny of the public postsecondary institutions' programs and budgets is carried out in the state legislature and in interaction between it and whatever higher education coordinating body functions in the state. While this may be a selective rather than comprehensive process, the institutions are subjected to review by elected representatives of the body politic, and among other criteria have to defend their funding requests in terms of meeting state needs.

It is the community colleges—and they enroll nearly half of all students entering postsecondary education—which are most community-oriented and enroll large numbers of part-time and older students. The average age of community college students, now 29, testifies to their catering to the employed, most of whom enroll to acquire or upgrade their job qualifications. However, if the community colleges are to be more effective in their communities, they may need to alter their traditional "delivery systems," offering courses in a range of locations and circumstances—factories and high schools, for instance—thus providing further education opportunities outside their walls at places where the new student constituencies are to be found.

For reasons of tradition and history postsecondary education in Australia is more professionally and vocationally oriented than in the United States. Mounting concern with unemployment, especially among young people, and the need to rationalize postsecondary education, led to the appointment in 1976 of the Committee of Inquiry into Education and Training, mentioned earlier as the "Williams Committee." It is concerned with "the provision of educational facilities and services . . . and the relationship between the educational system and the labour market." Postsecondary education coordination, its relationship to the community, preparation for employment, recurrent education, and manpower forecasting figure significantly in the report of this committee due in mid-1978.

Conclusions

The Australian-U.S. seminar covered a wide range of issues in the Changing Balance in Federal-State Responsibilities in Postsecondary Education in the two countries. Based on a brief two-week visit, this report does not purport to do justice to the complexity of these issues. As the seminar's focus was chiefly on the Australian situation, apart from the comments in the foregoing subsections these conclusions relate mainly to Australia. However, in that all federal countries face somewhat comparable problems in determining and meshing the respective roles of federal and state governments in postsecondary education, the seminar should have relevance in other federal countries. Indeed, the seminar discussions should be of interest to any country whose postsecondary education system faces the need to maximize resources, to justify mounting costs, to rationalize and coordinate programs and institutions, to determine how much and what kind of postsecondary education the society needs, and to enhance the contribution of postsecondary education to the solution of problems of unemployment, especially the unemployment of young people.

The United States and Australia, while vastly different in some respects, share certain common features. Both have federal systems of government, both are industrialized countries, and both have a multicultural society. Both countries need a postsecondary education system which serves several purposes or goals. It must respond flexibly to changing requirements for trained manpower, including vocational, paraprofessional, technical, and professional. The system must provide a liberal education to that critical mass of people upon which a democratic society depends to function effectively in an interdependent world of such technological complexity as to defy traditional notions of citizen autonomy and participation. And the postsecondary system must have also a research capacity to identify and seek solutions to problems on the frontiers of knowledge.

At a practical level the chief issues now facing Australian postsecondary education are:

1) how to achieve and preserve diversity in the system without straitjacketing the three sectors on the one hand and yet preventing "academic creep" and duplication on the other;

2) how to balance the need for centralized coordination and rationalization with sufficient decentralization so that the individual institutions have an appropriate level of autonomy and are responsive to local and regional needs;

3) how to reconcile the paramount role of the Commonwealth in funding postsecondary education with the states' having primary responsibility for education;

4) how to ensure that the new Tertiary Education Commission operates so as to assure diversity, flexibility, coordination and rationalization, and the responsiveness of the system to changing social needs; and finally

5) how to make possible a detached continuing review of the long-range goals of the postsecondary education system and its effectiveness in implementing them.

1) *Diversity Without Rigidity*

The Australian postsecondary education system has sought diversity in institutions and programs through developing the three sectors of universities, CAEs, and TAFE. However, this compartmentalization of the sectors has failed to assure either a clear differentiation between the separate sectors or to promote a great degree of diversity within each. By putting the institutions in separate pigeonholes and treating them more or less the same—in keeping with Australia's egalitarianism—relatively little diversity within each category has been possible

except, of course, in the CAEs. The system of basing funding of the universities and CAEs mainly on formulae involving Full-time Equivalent (FTE) rather than programs, while encouraging some competition for students, in general has not stimulated the competition in program development which might bring more diversity among institutions in a given sector.

At the same time there is no clear demarcation between the missions of the three sectors. With the declining need for teacher training, the single-purpose teacher training institutions are and will continue to be squeezed between the universities and the TAFE institutions to broaden their general education offerings. Already, for example, as mentioned earlier, it is difficult to argue that the DOCIT group of CAEs differ significantly from the universities.

The compartmentalization of the institutions into three sectors has played a useful role in preventing any major "academic creep" or drift with institutions reshaping themselves to fit a higher model. However, the fact that this compartmentalization has been implemented by separate review bodies for each sector has been an obstacle to effective comprehensive review of the sectors as a single but diversified entity. Consultations between the universities, Advanced Education, and TAFE commissions have not sufficed for this task. Given the considerable autonomy of the universities, the UC does not supervise and approve university programs unless they involve major costs or significant duplication, much less does it attempt program coordination between the universities and CAEs. Because the TAFE institutions are mostly under the State Departments of Education or Technical Education, coordination between them and the CAE's is attempted or practicable in only a very limited way. In Victoria the separate coordination of the two CAE subgroups, technical institutions and teachers colleges makes effective coordination difficult.

Thus, it seems clear that a much greater degree of coordination across all three sectors of postsecondary education is needed if duplication and academic creep are to be minimized

and a genuine diversity among and within the sectors is to be fostered. A major question is whether this coordination should be carried out primarily at the Commonwealth level under the new Tertiary Education Commission or at the state level with the new South Wales Board of Higher Education as a possible model. Even more important is the question of balancing appropriate levels of institutional autonomy for the institutions in the several sectors with overall coordination and rationalization of the system.

2) *Centralization or Decentralization?*

Given the lack of a tradition of local government in Australia, decision making on postsecondary education is not likely to shift to the local level. Darwin Community College, a special case because of its geographic and other circumstances, is an impressive but unique example of a community-based institution. Consequently, the basic issues are whether coordination should be at the state or Commonwealth levels or both, and what aspects of the system it should encompass. The present arrangement of coordinating the universities almost entirely at the Commonwealth level, the CAEs at both the Commonwealth and state levels, and TAFE mainly at the state level, not only involves unequal treatment (which the CAEs in particular resent) but precludes effective coordination across all three sectors.

The fact that the states have primary responsibilities for education and that apart from such fields as medicine, veterinary medicine, and dentistry the postsecondary education system is more like an agglomeration of six separate state systems than a single unitary system would seem to indicate that many wealth and state levels, and TAFE mainly at the state level This would have the advantage of locating decision making at the "work-face" of the enterprise and hence making it more likely that the needs and interests of the states and of special regional concerns within them are taken into account. The relative isolation and untypicality of Canberra vis-à-vis the

mainstream of Australian life also argues for more decision making at the state level.

The universities are, however, firmly opposed to having their fate in the hands of state authorities. They think their interests are better understood and served under the present arrangement of a Commonwealth Universities Commission, providing a separate identity from the rest of postsecondary education, than by across-the-board coordination which might undermine the essential differences between the universities and other postsecondary education. The CAEs tend to favor decision making at the state level, in part from the conviction that Commonwealth coordination entails excessive regulation, interference, bureaucratization, and needless delays. The TAFE institutions chafe under the restrictions of the largely categorical funding coming from the states. The state coordinating bodies, mostly the Boards of Advanced Education, find themselves in the difficult position of serving two masters because of the division of responsibility between the state and Commonwealth governments, with the Commonwealth calling for the balanced development of the colleges and providing the funds on the basis of approved courses, and the state government calling for the CAEs to meet state needs, to diversify, and to rationalize.

Tidy formulistic solutions are not likely to resolve in any permanent way what kinds of decisions should be coordinated at which level. The concept of "finding the best mix" can lead to rigidity, excessive hopes, and early rejection of the solution hit upon. One should therefore seek "the least bad mix" and not aim at permanent solution. However, as some issues by their nature call for efforts at the national level, centralized decision making should be applied to them. These include facilitating access to postsecondary education, the research role of the system, and the quality of professional training, as in medicine.

The first two are currently and should remain primarily Commonwealth concerns, falling respectively under the Ter-

tiary Education Assistance Scheme and the Australian Research Grants Committee and other Commonwealth research funding agencies. The student aid program should, however, provide more support for students living away from home in order to facilitate the inter-state mobility of students and hence a greater competitiveness in the system nationally.

The Commonwealth role, in ensuring the quality of professional training, implies a more differentiated treatment among postsecondary institutions and programs within them so that the institutions are encouraged to compete more actively for the funds needed to achieve and maintain quality, so that the system overall cultivates peaks of excellence. Certainly the Universities Commission has been pressing greater rationalization, e.g., in the fields of law, social work, Asian studies, but more variations in program and institutional quality should be permitted. More competition and differentiation should encourage rather than dampen institutional initiatives, and should reenforce autonomy rather than detract from it. To maintain the necessary delicate balance between institutional flexibility, made possible largely through block rather than earmarked funding of recurrent costs and Commonwealth intervention to promote rationalization, requires continuing close communication and consultation at all levels of the three sectors.

It is with regard to the interface between the universities and the CAEs that the decision on centralized vs. decentralized decision making is most difficult, especially because the DOCIT group institutions are in many respects more similar to the universities than to the other CAEs, and because the latter are beginning to move into the liberal arts and science fields traditionally offered at the universities. If the greater intersectoral coordination recommended in the preceding subsection were undertaken at the Commonwealth level, given the large array of institutions involved, the task would be extraordinarily complex and necessitate a substantial bureaucracy (the new Tertiary Education Commission staff is, however, expected to be under 100 persons). Solving that by

excluding TAFE institutions from centralized consideration and review would mean turning back the clock and ignoring their enlarging role in the total tertiary system.

Just as some elements in postsecondary education call for decisions at the national level, so do others pull toward regional solutions. Included among them are occupational and vocational training, and responsiveness and service to the region and to the community. As all three sectors are involved in these areas, although the universities less so, decision making should take place mainly at the state level. The Commonwealth role should chiefly be one of endorsing state-level decisions (it will spend about $1.2 billion annually), encouraging initiatives and diversity, and assuring a coherence and comprehensiveness in the total system.

Every state should therefore have a coordinating body encompassing all three sectors which focuses on the overall programs offered by the institutions, the avoidance of duplication, and responsiveness to regional and state needs. In order for these state bodies to be effective, the TAFE institutions—or at least their postsecondary programs—should be shifted out of the jurisdiction of the state Departments of Education and Technical Education either directly to the intersectoral state bodies or to separate boards or councils, as now contemplated in Western Australia. These in turn would be represented in the intersectoral state coordinating bodies. Because the tripartite bodies would include the universities only in a limited way—where they interface with the other institutions—their role in the total system should be not diminished but clarified and reaffirmed. The same would apply to the DOCIT institutions to the extent that they are in many ways more like the universities than the other smaller and often single-purpose CAEs. As the boundaries shift between those aspects of postsecondary education of most concern to the Commonwealth and to the states, what falls under the state and the Commonwealth coordinating bodies should also shift; the Commonwealth body should have the final but not the only word on such changes.

3) *Funding and Authority in Postsecondary Education*

A major anomaly in Australian postsecondary education is the fact that the universities and CAEs are funded almost exclusively by the Commonwealth whereas the states theoretically have the principal responsibility for education, including higher education. Would a return to shared funding between the Commonwealth and state governments strengthen postsecondary education, or would it make any significant difference? The proposed New Federalism is not likely to bring shared funding, but rather, as already mentioned, to force the states to take responsibility for decisions to spend or not to spend, and to impose taxes which would enable them to pick up special programs which the Commonwealth government is not likely to support.

The common view in Australia that funding postsecondary education should be a Commonwealth responsibility is particularly surprising in that the almost total Commonwealth funding has such a short history, the postsecondary education system of each state is largely isolated from the others, and equalization schemes in federal/state finance expect to even out disparities in financial resources and support among the states. Whether or not diminished Commonwealth funding under the banner of the New Federalism is a positive force in postsecondary education will depend greatly upon how the states respond to it. Should they resist local pressures to supplement the federal support, assuming federal support is inadequate, the quality and scope of postsecondary education will be the victim. However, should the states take on the funding of particular aspects of postsecondary education within their borders (as seems unlikely), the six state systems might become more responsive to state needs, and competition among the states might produce a greater diversity as well as rationalization among the states and nationally.

The "two tap" theory of funding postsecondary education has its advocates and detractors. With two taps, Commonwealth and state, the institutions and sectors can play them off against each other, and possibly end up with more resources

than if they depended on a single tap. When there was shared funding, it was matched funding—so more like one tap with two outlets than two taps. Alternatively, the existence of two taps might encourage "buck passing" and leave the postsecondary institutions with less support than if there were one. But a single hand can turn off one tap. Furthermore, if a single tap dispenses for all three sectors treated as one system, Australian egalitarianism might move the funding process toward uniform formulae across sectors, to the detriment of the universities in particular because of their more generous funding under present arrangements.

Given Australia's history and social traditions, both Commonwealth and state funding could result in diminished resources for the total system and the leveling of differences in support criteria for the different sectors. However, should the existence of two taps produce more competition among the institutions and sectors, increase institutional accountability at the state level, and give the states enhanced authority over postsecondary education to match their constitutional responsibilities, the postsecondary system as a whole might be strengthened. Much would depend upon political forces in the different states and how willing state governments are to impose taxes. Courageous political decision making at the state level is not, according to several of the Australian participants, part of the Australian tradition. Although the quality of postsecondary education should not be a casualty of this situation, it is hoped that as a consequence of impelling the states to take more responsibility for their postsecondary education systems, centralizing tendencies in Australian social policy can be offset through enlarging the role of the states and assuring that postsecondary education is adequately funded, less dominated by Canberra, and more responsive to the needs of the states.

The fact that the financing of Australian postsecondary education has now moved to a "steady state," and that the TAFE institutions will apparently receive a relatively larger share of Commonwealth funds for postsecondary education, makes finance an increasingly critical issue. Despite the strong

resistance which a renewed imposition of tuition fees would encounter, the universities and colleges should give serious consideration to this as a means of increasing their resources, unless public funding is then diminished by the amount of funds collected in tuition. Moreover, even though philanthropic support of postsecondary education is not a tradition in Australia, nor does present legislation provide tax deductions for private giving, the postsecondary education institutions should make a major and continuing effort to obtain funds from private donors, corporations, and foundations.

In view of the dominant role played by public bodies at the Commonwealth and state levels in coordinating postsecondary education, it is surprising that the institutions themselves, especially in the university sector, have so far not organized themselves to provide a counterweight to government in order to preserve their autonomy. The Australian Vice-Chancellors Committee has not performed this function or attempted to do so. With increased centralization likely as a result of the establishment of the Tertiary Education Commission, it would appear that the time has come for educational leaders to exercise a concerted influence vis-à-vis government on postsecondary education affairs.

4) *The New Tertiary Education Commission*

The new Tertiary Education Commission, being legislated by the Commonwealth Parliament as the Australian-U.S. Seminar was in session, is to "develop and recommend policies as the basis of Commonwealth financial support for institutions in the whole postschool sector of education throughout Australia." The former Commissions will be replaced by three Councils, but while they will continue much of their former mandate, they will be "subject to the co-ordinating functions and authority of the new Tertiary Education Commission." The second reading of the bill to set up the new Commission made clear that tertiary includes postschool, i.e., TAFE, and that the Commonwealth government firmly intends "to devote special attention to technical and further education." The

distinct nature and status of the three sectors of tertiary education and the obligation of the new Commission to consult with state authorities were also stressed.

How the new Commission will operate is not yet clear. Specifically, will power over the three sectors of tertiary education be concentrated in the commission, or will it mainly be concerned by the coordination between the sectors and encouraging coordination within the individual states? The Commonwealth Minister for Education referred to the states' "responsibilities in the whole education field and . . . their importance to the achievement of rationalisation and co-ordination of the funding of post-school education." The commission thus has several options: to press for more coordination at the state level and give priority to this, to focus its coordinating efforts at the interfaces between the three sectors, or to concentrate power in its own hands over all three sectors.

The growing political importance of TAFE may point to the second option because the closer integration of TAFE in Commonwealth coordination may bring with it more political pressures on the commission because of TAFE's extensive constituency. The first option, namely the new commission catalyzing more coordination within the states, well suits the political realities of the Commonwealth-state relationships. A consequence of the divided responsibility in postsecondary education is that forceful measures are more feasible when state and Commonwealth bodies reenforce each other than when either seeks to bring about change without such mutual back-stopping. State coordination efforts are likely to be more effective if the Commonwealth Government requires it as a condition of support. The intent in the establishment of the new commission, insofar as it is spelled out, suggests that the commission will play the dominant role in coordination rather than restrict itself to stimulating parallel efforts at the Commonwealth level between its constituent Councils and at the state level among the agencies involved there.

The role of the commission will depend greatly upon whether the Commonwealth Government's guidelines to the

commission set forth fixed amounts of support for each sector in the tertiary system, or if it is left to the Commission to determine how to allocate a lump sum among the three sectors. That the Commonwealth Government intends to give more priority to technical and further education suggests that the Ministry will itself decide on these allocations or, if not, that the Commission will hardly have a free rein in determining them. That each council will have direct access to the Minister and the right "to advise the Minister upon whatever matters it wishes within its own sector of education" appears to confirm that the commission will take its cues regarding priorities from the Commonwealth Government.

Whether the Ministry or the Tertiary Commission plays the dominant role in orchestrating coordination, it is to be hoped that they will encourage a high degree of pluralism within the national system of tertiary education with responsibility and initiative spread over the several levels and sectors involved. Admittedly, a pluralistic system has its own problems; it is inherently unstable, entails unavoidable gaps and duplication, and lacks the clear lines of authority of a unified system. However, pluralism is more likely to encourage initiative and to tolerate rather than paralyze diversity. These qualities are needed more than ever if the individual institutions are to continue to justify whatever measure of autonomy they claim, to respond flexibly to changing circumstances, and to identify and meet societal needs. If the total system is to have the diversity needed to provide not only real options but reversible options, a pluralistic structure and method of functioning is essential.

Finally, assessments of how the Tertiary Commission might or should function must be tempered by an awareness of the limitations of depending on the right superstructure to bring answers to problems of organization and coordination. There should be more concern with the quality of the processes involved and with the forces at work in the superstructure. It is difficult to demonstrate that among various possible superstructures for the coordination of postsecondary education,

there is one best model. Different kinds can have the same result. What is important are the processes that can be adopted within a range of structures. Concern should focus not on superstructures but on "super processes." Do they provide the information and consultation so badly needed? Where are decisions best made? The new Tertiary Commission should not err in focusing on structure to the neglect of the processes called for to make the structure operable.

5) *On-Going Review of Postsecondary Education*

There is presently in Australia no system for a sustained study of where postsecondary education should be some 15 or 20 years hence. Although a number of the universities have units concerned with higher education, their focus is more on teaching methodology and improvement than on analyzing the system and recommending future directions. Nor are there bodies outside of the postsecondary system which attempt this function, in contrast to the situation in the United States where a variety of private foundations and other organizations apply themselves to this task, such as the Carnegie Commission on Higher Education and more recently the Carnegie Council on Policy Studies in Higher Education. A detached, long-range and continuing view is badly needed in the Australian picture. It should not be associated with a particular postsecondary institution, but should establish links with all.

A Research and Development Center on Tertiary Education would provide a vital perspective to the new Tertiary Commission in a variety of ways. Criteria for rationalization offer only one such opportunity and one of some urgency because if an independent body should come up with criteria, it would take much of the pressure off agencies having to decide on the consolidation or elimination of existing institutions. The many special commissions of inquiry have been fulfilling an important role, but a more limited one because of their *ad hoc* and temporary character. A longer look by a permanent body independent of the postsecondary system and relatively disassociated

with government would plug a major gap in the Australian postsecondary education system.

Implications for Higher Education of Federal Systems

The seminar participants quailed at the suggestion that their two-week inquiry into higher education in Australia and the United States, with provocative insights from the Canadian scene, could produce broad, useful generalizations about the effects on higher education in countries with federal political structures. The three countries differ greatly in the balance between federal and state authority and in their higher education systems. Generalizations derived from their experiences are hardly likely to be applicable in a significant way to such other federally organized nations as Brazil, the USSR, the Federal Republic of Germany, India, or Mexico. Hazardous as the undertaking is, this coda to the report of the seminar attempts such generalizations. However, they are based not on Australia and the United States only, but attempt to incorporate the experience of Canada and the Federal Republic of Germany, two other important federal systems.

I. National Diversity and Historical Tradition

Favoring federal centralization are the following factors:

a) Relatively few states, as in Australia (6), Germany (11); Canada (9) is an exception.
b) Cultural homogeneity or noncoincidence geographically of culturally diverse populations with the states: United States, Germany, Australia.
c) Relatively small population: Australia (14 million); Canada (23 million) again is an exception.
d) Little history and tradition of separate and noncompetitive identity of states: the United States fits most closely.

II. Complexity and Range of Higher Education

a) Mass higher education requires more public resources and encompasses public purposes more than does elite or elite-

to-mass, and hence must admit more public accountability, thus tending toward centralization.

b) Diversity within higher education in kinds of institutions, their aims, structures, and funding presents obstacles to centralization.

c) The availability of financial support from multiple sources, including private as well as public, gives the institutions more autonomy and the public interest less leverage, and impedes centralization.

d) The higher the level of education involved, the more likely is centralization.

e) The stronger the coordinating bodies at state level vis-à-vis federal agencies, the less impact will centralizing federal forces have in relation to the individual institutions, but the more institutional autonomy may be conceded to these coordinating bodies.

III. Federal-State Structures

a) Written constitutions rarely can withstand political pressures, frequently offering loopholes to bypass seemingly precise constitutional provisions.

b) The spending power of federal governments is a common means to obviate constitutional restrictions and, having gained acceptance under a wide range of social policies essential in industrialized societies, can be resorted to for higher education support and concomitant federal influence and intervention.

c) Federal systems in which federal-state roles involve complementarity are less likely to have centralized higher education systems, as in the United States, where federal support is mainly categorical and the states are responsible for basic costs, than, those (1) characterized by a parallelism of responsibilities as in Australia, where both federal and state bodies review the financing of basic costs; or (2) which need agreement at state and federal levels on major policies, as in Germany.

d) Little centralization is likely in systems relegating virtually total authority and accountability to the state level, as in Canada.

IV. Institutional Governance

a) The more collegial institutional governance is, and the more it can achieve internal consensus on major issues, the more autonomy the institution is likely to retain.
b) The greater the in-house expertise in budgeting, internal rationalization, and institutional management, the better the institution can negotiate and preserve a degree of independence vis-à-vis coordinating bodies and state and federal government authorities.
c) Effective interinstitutional cooperation in the face of centralizing tendencies emanating from government agencies depends importantly on strong institutional leadership which can genuinely speak for the institution.

V. Finance of Higher Education

a) When the federal government provides basic institutional support, this has a greater centralizing effect on higher education, as in Australia, than when the states have this function, as in the United States, Canada, and Germany.
b) Categorical federal support for special purposes does not have a significant centralizing impact, e.g., federal support of the planning and coordinating efforts of the states for research if funding decisions are made by peer review as in the United States, or for capital costs (as in Germany and the United States), unless uniform criteria for funding impinge on other policy areas and have important accountability requirements.
c) Federal support for student assistance schemes is unlikely to have a centralizing effect unless tied to criteria calling for greater uniformity in the higher education system, for example, fixed study periods as in Germany under the 1976 *Hochschulrahmengesetz*.

VI. Access to Higher Education

a) In federal systems which leave to the individual institutions and/or the states the determination of access criteria and procedures, access arrangements have no centralizing effect, as in Australia and Canada.

b) Federal systems which prescribe at the federal level the criteria and procedures for access to higher education not only are vulnerable to major centralizing effects, but in competitive admission fields are likely to see admissions decisions shift to the federal government, initially the legislature and ultimately the courts, as in Germany and increasingly in the United States.

FEDERAL AND STATE PRIORITIES FOR POSTSECONDARY EDUCATION:

An Australian Perspective

Peter Karmel

In a unitary system of government, government funding of postsecondary education can reflect a coherent policy of priorities. The existence of a federal system adds a second dimension to the establishment of government priorities in postsecondary education. The valuation of social returns in relation to costs and the political priorities which influence governmental educational policy will not necessarily be congruent from federal and state points of view.

Cost-benefit assessments by federal and state authorities of policies in postsecondary education may place differing valuations on the outcomes of education. The priorities of the two sets of authorities may differ as may the weights they attach to the various functions and objectives of the educational system. Second, all outcomes of educational outlays will not necessarily be "captured" in a given state. Thus expenditures in one state may, to a significant degree, benefit other states or the nation as a whole. Third, where financial responsibility is divided between federal and state governments, the costs of a particular educational policy may not be wholly borne by the authority which expects to obtain the benefits of the policy.

Differing Valuations

The valuations which federal and state governments attach to educational policies vary according to the particular functions and objectives of postsecondary education. In broad terms the five main roles of postsecondary education are:

(1) Development of the capacities of the individual, including cognitive and affective skills;

(2) Socialization of the individual in the ways of the society. This includes the preparation of the individual for living and working with other individuals in a social situation;

(3) Sorting out of the individual into his place in the socioeconomic hierarchy, through providing him with skills and qualifications to enable him to obtain a job;

(4) Caring for the young before they become full members of society. This is a custodial role. Young people spend from 10 to 20 years as full-time students in educational institutions. Enrollment in such institutions beyond the age of compulsion is an alternative to active participation in the work force or unemployment;

(5) Transmission, conservation and extension of knowledge, including the cultural heritage. The transmission of knowledge is a responsibility of all educational institutions; its conservation and extension is a special responsibility of such institutions as universities.

Goals of Higher Education

In communities like those of Australia and the United States these functions are performed with a view to reaching certain goals. Summarized briefly, these usually include:

(1) Developing the person through education aimed at providing the individual with:
a competence in reading, writing, and numbering;

an interest in learning;
a capacity to understand himself;
a capacity to understand others;
an appreciation of the achievement of others;
an understanding of the nature of society;
a critical mind;
certain personal values including honesty, compassion for the less fortunate, respect for the individuality of others, fair dealing, and selflessness;

(2) Induction to the norms of the society;

(3) Matching the supplies of skilled and qualified individuals with the demands for them in the labor market;

(4) Increasing social mobility, i.e. reducing inequality of social opportunity by promoting educational opportunity.

The weights or importance which governments attach to these functions and objectives reflect the political (ideological) position of the government concerned. However, quite apart from that, they also reflect the differing responsibilities of governments or perhaps more accurately the differing perceptions that governments have of their responsibilities. In a federal system with a division of constitutional responsibilities, as in Australia or the United States, it is not surprising that the federal government shows a concern for particular aspects of postsecondary education which do not coincide with states' priorities.

By and large state governments are concerned with the development of the capacities of the individual because they have a more intimate responsibility for providing primary and secondary schooling and for the activities of the local communities. They are also likely to be concerned with the custodial role of the educational system. It follows that the lower levels of government are likely to be concerned with the objectives of the educational system which relate to the individual

person and his place in society. One would expect that state governments would tend to emphasize the *social demand* for higher education and be concerned with providing places in universities and colleges for all qualified students who wish to avail themselves of higher education.

On the other hand, the federal government is likely to be interested in the operations of the economy as a whole in terms of both its economic and military strength. It will therefore tend to be concerned with the production of highly qualified manpower with a view to increasing national productivity and obtaining balance in the labor market between the supply of and the demand for the higher skills. It will also be concerned with the transmission, conservation and extension of knowledge including the cultural heritage, since these will tend to be regarded as a national concern.

In the United States, the federal government has played a special part in emphasizing the importance of the fourth goal mentioned above, namely increasing social mobility. Indeed, the two main areas in which the U.S. federal government has supported higher education have been in the promotion of equal opportunity programs, *via* student assistance of various kinds, and in the fostering of research—the latter relating to the government's concern with defense and political prestige.

In Australia, Commonwealth intrusion into the funding of higher education originated with the provision of student assistance after World War II and Commonwealth support for university and college expansion in the 1960s was undoubtedly stimulated by an interest in the production of highly qualified manpower.

The ideological flavor of governments in supporting higher education is most clearly seen with respect to the goal of promoting equality of educational opportunity. Belief in equality of opportunity does not necessarily constitute a belief in equality of economic outcomes. Neither Australian nor American societies are "equal" ones, although the degree of inequality is probably somewhat greater in the United States

than in Australia. Nevertheless, the view that a person's socio-economic position and cultural background should not unduly prejudice his life chances is widely held in both countries. However, the degree to which the promotion of equality of educational opportunity is pursued depends to a significant extent on the ideological flavor of the government of the day.

Policies relating to equality of educational opportunities may be pursued with respect to both *individuals* and the *pattern* of educational institutions. Assistance to individuals, whether by way of financial allowances to students or the provision of compensatory funds for the disadvantaged, does not necessarily involve governments in intervening in post-secondary education either at institutional or system level. However, the promotion of educational opportunities may best be served by reforms in the pattern of higher education, for example by moving away from elitist forms of education, opening up entry to universities and colleges, and providing nontraditional modes of learning and teaching.

Capturing Returns

In a federal system the economic returns from expenditures on higher education may be diffused over the whole nation. Individual states may then be reluctant to invest in higher education and may argue for a federal government commitment to "national" obligations. In particular, there is likely to be a national rather than a local market for highly qualified manpower. Not only is such manpower relatively mobile but job opportunities for certain kinds of skills may be heavily concentrated geographically. For example, in Australia opportunities for executive employment in large corporations are mainly in Sydney or Melbourne. The market for such manpower at the state level may simply be too small—this is particularly true of the less populous and poorer states. Much the same applies to the benefits that may result from expenditures on research and development, which again is an area which has a "national" flavor.

Economic returns, however, are not the only benefits that flow from outlays on higher education. The locations of new institutions or of new major developments have clear political implications. Any such development is, of course, located in both a federal and a state electorate. The purely party political interests of governments do not necessarily coincide at federal and state levels, so that the location of a new institution in a particular state may provide political benefits at the federal level of a magnitude different from those at the state level. There is, moreover, the question of national prestige. The establishment of a major national center of excellence might involve costs which far outweigh the political return at the purely state level.

Bearing the Costs

In Australia, higher education is the extreme case of facilities, which are constitutionally the responsibility of the states, being wholly funded by the federal authorities. Universities and colleges obtain almost 100 percent of their funds from the federal government, although, except for those institutions established in federal territory, they have all been established by state governments under Acts of State Parliaments. Moreover, the funding of the ongoing operations of these institutions is by way of block grants with virtually no specification of the way in which the money should be spent. Except for the provisions of funds to support building projects there has been little use of specific purpose grants to universities and colleges aimed at achieving specifically Commonwealth objectives. Indeed federal policy on higher education has not been spelled out in great detail but has aimed at building up the broad infrastructure of higher education with a view to providing opportunities for young Australians to undertake higher education and to ensuring a supply of manpower with the higher skills.

It is natural to ask whether these arrangements have encouraged irresponsible behavior on the part of the states that

obtain significant benefits—even if not all the benefits—at virtually no cost. Conversely, have they resulted in a high-handed attitude on the part of the federal government which, because it pays the piper, calls the tune?

There is some evidence that, during the period of major expansion in higher education when funds were relatively freely available, some overexpansion in tertiary facilities was encouraged by state authorities. Moreover, since the federal government was funding universities and colleges wholly while the state governments were the main source of funds for institutions of technical and further education, there was a tendency for some courses of study to be switched from TAFE institutions into colleges of advanced education. It is also the case that the location of some new institutions was influenced by state, as well as by federal, electoral considerations. On the other hand, in the last few years funds for higher education have been subject to strict constraints; and states have been concerned with the effectiveness of their systems of higher education so that they can obtain the best value for the funds available. Under these circumstances the separation of funding from responsibility may have little effect on the efficient operation of the system.

As far as the second question is concerned, the federal agencies responsible for funding universities and colleges have always been required to consult with state authorities and the institutions concerned. Although there have been some complaints on certain issues from individual state authorities, consultation has always taken place and there have been few occasions in which the federal government has advanced policies contrary to the wishes of state governments. There have, of course, been differences of opinion in matters of detail but the federal agencies have aimed at being responsive to state views, and an examination of the published reports of the agencies would confirm that the federal government has not acted in a high-handed manner with respect to state institutions.

Conclusion

In formulating policies for postsecondary education, federal and state priorities will almost certainly differ. Although there is a tendency to regard the federal authorities as concerned with "national" policies, the federal interest cannot necessarily be defined as *the* national interest. What is the national interest depends on one's point of view, and the interests of communities defined at national, state or local level do not necessarily coincide in all particulars. There is likely to be a continuing and irresolvable tension between federal and state authorities. The stance of federal authorities is likely to be expressed in terms of central planning, the national interest and an objective assessment of costs and benefits, while the states' stance will emphasize devolution, the local community, and grass roots considerations.

The existence of the federal-state relationship will complicate problems which would in any event exist within a unitary system. There are no simple answers to the question of the appropriate level of provision of postsecondary education, the mix of different types of institutions and courses, and the geographical spread. Moreover, the two levels of government in a federal system only further complicate the reconciliation of government with institutional priorities. The autonomy of institutions may to some extent be promoted by the existence of two competing levels of government, but this will not assist the development of coherent educational policies.

Finally, the existence of a federal structure makes it necessary to examine whether the individual states ought to have a broadly equal provision of postsecondary education. In the Australian context, in which the provision of government services at an Australia-wide standard is an accepted principle of the federal system, the pressures toward equal provision among the states are considerable.

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